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VitalScreen™ S

15" Medical Certified Display
VSS15X / VSS15X-TR

Operations Manual

www.planar.com

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Regulatory Compliance

This display has been tested and certified to international medical safetystandards IEC/EN 60601-1 and IEC/EN 60601-1-2, and is certified to meet C22.2 No. 601.1-M90 (C US Mark).

Because many medical offices are located in residential areas, the medical display, in addition to meeting medical requirements, has also been tested and found to comply with the limits for Federal Communications Commission (FCC) Class B computing devices in a typically configured system. It is the system integrator or configurer's responsibility to test and ensure that the entire system complies with applicable electromagnetic compatibility (EMC) laws.

Planar Systems, Inc. has made great efforts to support the medical device industry, in particular, medical device manufacturers and medical device system integrators. We offer state-of-the-art color displays that are compliant with worldwide accepted medical device safety standards, and for the European market, CE-marked displays based on compliance with counsel directive 93/42/EEC commonly referred to as the Medical Device Directive (MDD). The following summarizes our qualification of these displays as it relates to compliance with the MDD.

The European Medical Device Directive requires that the intended use of the device be defined. The intended use of these displays is "to display alphanumeric, graphic, and image data as inputted from any type of medical device." These displays do not provide a measurement function in any way, and it is the device and systems manufacturer's responsibility to verify its function in the integrated device or system.

The display was classified as required by the MDD according to Annex IX of the directive and the medical device (MEDDEV) guidance available at the time of classification. Because the display uses electrical energy and has no direct patient connections and—by itself—no medical utility, the display is classified according to Rule 12 as an MDD Class I device-component or accessory. The MDD states that manufacturers of Class I medical devices or accessories shall satisfy the requirements in regard to design and manufacturing controls, that is, the applicable assessment route to be used for CE-marking under the MDD, and it shall carry the CE mark according to Annex XII of the directive, with no notified body annotation.

The applicable safety standards for an MDD Class I display are IEC/EN 60601-1:1900 along with Amendments 1 and 2. To help the medical device designer evaluate the suitability of these displays, Planar has also conducted EMC testing to IEC 60601-1-2 as it can be applied. The display with its power supply alone does not represent a functional medical device. Hence, Planar configured a minimal operating system to exercise the display. The resulting data are made available to interested parties.

The data are informative data, not certification data. Certification data must be obtained by the device or system integrator according to Article 12 of the MDD titled "Particular procedure for systems and procedure packs." Paragraph 2 clearly outlines the device or system integrator's responsibility in this matter.

In summary, Planar Systems, Inc. is CE-marking these displays under the Medical Device Directive, which establishes compliance to the basic medical safety standards. However, EMC compliance can only be accomplished in the configured medical device or system and is the responsibility of the device or system manufacturer. Planar has the necessary documentation such as IEC 60601-1 notified body and other third-party test reports and certifications, a risk/hazard analysis, an essential requirements checklist, and the Planar International Electrotechnical Commission (IEC) declaration of conformity.

Planar Systems, Inc., located in Beaverton, Oregon, USA, is the manufacturer of these displays in the meaning of the directive. As required by the MDD in Article 14, Planar Systems, Inc., not residing in the European Economic Area (EEA), has a European representative, Planar Systems, Inc.—Espoo, Finland.

In the opinion of Planar Systems, Inc. registration required to put this device into commerce is the responsibility of the medical device/system manufacturer, and Planar supports this requirement by providing a European commission (EC) declaration of conformity. If Planar supplies a display to an end user, rather than a device manufacturer, it is the end user's responsibility to ensure continued compliance with the MDD of the system in which the display is integrated.

For vigilance reporting as required under Article 10 of the MDD, Planar Systems, Inc. will provide any information requested by competent authority to support any reported incident investigation by such an authority.

European Union Declaration of Conformity for Medical Applications

A Declaration of Conformity has been filed for this product. For additional copies of the Declaration of Conformity document, contact Planar Systems, Inc. and request document number 001-0014-07 "Declaration of Conformity."

Product Information

Safety instructions

Store the display in its original carton when it is not in operation for extended periods of time. Also use the original packing materials and carton when shipping the display.

- Do not place the display near a window. Exposing the display to rain, water, moisture, or direct sunlight can damage it.
- Do not place anything on top of the video cable. Place the cable clear of foot traffic.
- Do not apply excessive pressure to the screen. Excessive pressure may cause permanent damage to the display.
- Refer all servicing to qualified personnel to maintain your warranty. The display and power adapter units contain no user-serviceable parts.
- Do not cover or obstruct the venting holes on the back of the display.
- Store the display in an environment with a temperature range from -20° to 65° Celsius. Storing your display outside this range could result in permanent damage.
- Do not expose the display to liquid or drop it. If the case has been damaged, the unit may pose a shock or fire hazard. Unplug the unit immediately and call customer support for assistance.
- Replace any cord or cable that is frayed or damaged with another of the same type and rating as supplied by Planar. The safety and regulatory listings and certifications are based on the cable supplied by Planar.
- Use only the power adapter that has been tested and approved for use with this display product. The power adapter must be plugged into a grounded power outlet.
- Do not immerse the power adapter in liquid, or a safety hazard could arise during use.
- Do not use the power adapter near inflammable anesthetics.

Cleaning instructions

Use only the products listed below for cleaning the display. The products differ for cleaning the screen and cleaning the plastic enclosure. Be sure you use only the specific products approved for either the screen or the enclosure.

Always apply the product to a clean nonabrasive cloth and then wipe the screen or plastic enclosure. Cleaners applied directly to the display could leak inside a non-sealed unit and cause damage. Be careful not to splash solvents on the screen or enclosure.

To clean the screen

1. Switch the power off.
2. Dampen a clean nonabrasive cloth with 70 percent isopropyl alcohol.
3. Wipe the screen gently with the dampened cloth.
4. Dry the screen with a clean nonabrasive cloth to remove any residue.

To clean the enclosure

1. Switch the power off.
2. Dampen a clean nonabrasive cloth with 70 percent isopropyl alcohol, or another recommended product.
3. Wipe the enclosure gently with the dampened cloth.
4. Dry the enclosure with a clean nonabrasive cloth to remove any residue.

Recommended for screen

Use 70 percent isopropyl alcohol. This is the only cleaning solution approved for use on the non-touch screen (model VSS15X) and the touch screen (model VSS15X-TR).

Do not use water or solvents (such as ketone, acetone) and aromatics (such as xylene, toluene).

Recommended for enclosure

You may also use 70% isopropyl alcohol to clean the plastic enclosure. Otherwise, use only the following products to clean the enclosure.

- Cidex®
- Clorox Clean-Up®
- “Green soap” United States Pharmacopoeia (USP)
- Formula 409®
- Sani-Cloth® Plus
- Virustat TBQ™

Do not use these products on the screen.

Symbol explanations

The symbols in this table may appear on the display or power adapter.

Symbol	Description
	Proof of conformity to applicable European Economic Community Council directives and two harmonized standards published in the official journal of the European Communities.
	The product has been tested and certified by CSA to C22.2 No. 601.1-M1990. If this mark appears with the indicators "C" and "US," the product is certified for the Canadian and U.S. markets, meeting the applicable Canadian and U.S. standards.
	The product has been tested to comply with FCC Class B standards.
	The product has been tested and certified by TÜV Rheinland in accordance with EN6061-1.
	More information available in accompanying documents.
	Protective earth ground.
	Indoor use only.
	Socket for headphones.

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About the VitalScreen S

The architecture of the VitalScreen™ S display incorporates an active-matrix LCD panel that produces a clear display with low radiation emission. This technology greatly reduces the radiation-related health concerns associated with CRT monitors.

More significant, the VitalScreen S display is medically certified under UL 2601 and IEC 60601. These qualifications make the display safer for the patient and protect the hospital from liability.

The VitalScreen S display is versatile, ergonomic, and user-friendly. It supports Plug and Play and displays most standards from 640 x 480 VGA to 1024 x 768 XGA. The digital controls located on the front panel allow you to easily adjust the display parameters using onscreen menus. When incorporated into a complete workstation, the display can be wall-mounted for added convenience.

Compatibility

The VitalScreen S display is compatible with x86 computers.

Unpack the Display

Make sure you receive the following items. If any item is missing or damaged, notify the customer service division of your sales company immediately.

- LCD screen
- Desk stand or VESA mounting plate
- Video cable
- Stereo audio cable
- Touchscreen cable (VSS15X-TR only)
- AC power adapter with 1.5-meter (5-foot) cable
- Medical-grade power cord (U.S. or European)
- CD with touchscreen driver and PDF of this manual
- EU Declaration of Conformity

Selecting a Workspace

Before you unpack the VitalScreen S display, select a suitable workspace for the display and computer.

You need a stable, level, and clean surface near a wall outlet.

Even though this display uses little power, place it in a location that allows sufficient airflow to ensure proper ventilation.

Avoid setting up the display near a window where sunlight often comes in. You will have difficulty seeing the screen with glare reflecting off the display.

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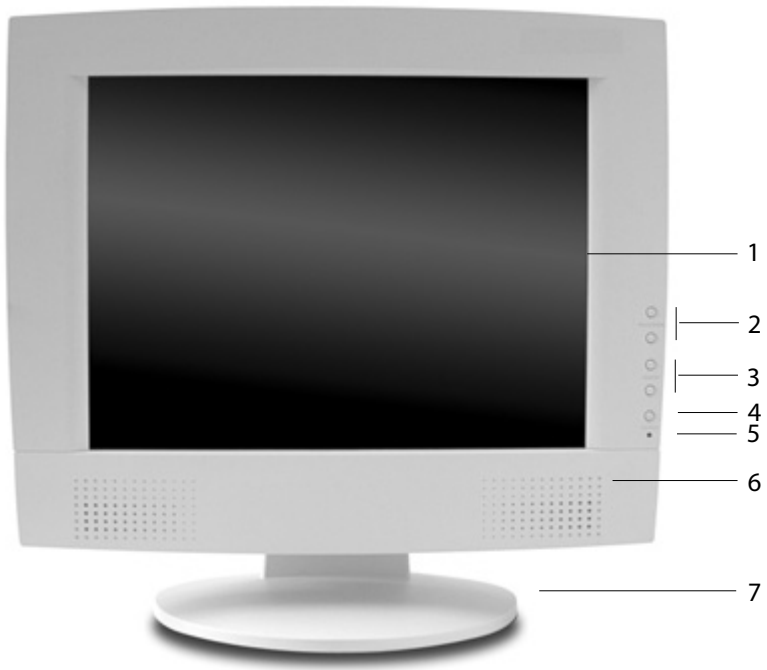
Identify the Components

The VitalScreen S display provides easy access to all controls and peripheral ports. The following illustrations of the front and back panels identify the display controls and ports.

Front panel



Legend

1 LCD screen
A 15-inch diagonal AMLCD. The screen supports a maximum resolution of 1024 x 768 (XGA).

2 Function UP and DOWN buttons
Vertical arrows to navigate the OSD menu. UP selects the functions to the left. DOWN selects the functions to the right.

3 Adjust PLUS and MINUS buttons
Controls to change the value of the selected function.

4 Power switch
Control to power ON or OFF.

5 Power ON indicator
An LED indicator that stays lit when the power is on and the display is receiving a proper video signal. The LED blinks slowly when the display is in power-saving mode.

6 Stereo speakers
Two transmission channels for audio.

7 Desk stand
Flat-surface support for the display. The stand allows you to pivot the screen to various viewing angles.

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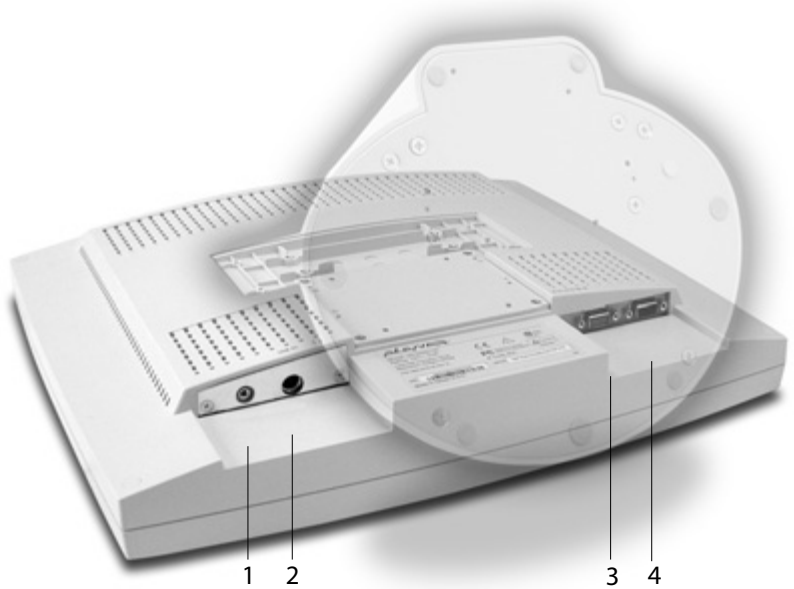
Back panel



Legend

1 Audio Line In
Jack for the audio cable. (You can also connect the CD-ROM Line Out to this jack.)

2 Power input port
(locking mini DIN connector)
Port for the power connector.

3 VGA connector port
Port for a 2-meter cable with two 15-pin D-sub VGA connectors; used to connect the display to the VGA card in your computer.

4 Touchscreen port
Port for the RS-232 cable; used to operate the optional touch screen. This cable is provided with the Optional Touch Screen package.

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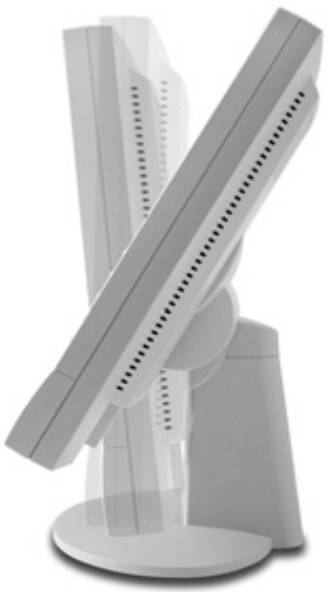
Adjust the Viewing Angle

You can adjust your VitalScreen S display to various viewing angles. This side view of the display shows the angle settings possible, ranging from -5° to 25°



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Connect the AC Power

You must use the Ault power adapter with this display unit.

1. Plug the AC power cord into the power adapter.
2. Plug the power connector into the locking mini DIN port on the back panel. Push the connector in until the locking mechanism clicks.
3. Plug the power cord into a grounded wall outlet.

Installation tips

For displays mounted on a desk stand, rotate the screen from landscape to portrait for easy access to the ports. If you need to place your display face down, lower it carefully on a protective cloth to protect the screen.

Avoiding power surges

Use a surge protector between the power adapter and the outlet to prevent sudden current variations from reaching the display.

"Unlocking" the power cord

To detach the cord, press down on the plug housing and then pull out.

In Operation: No power

Check that the display and computer are both turned on.

Verify that the outlet is functioning. Plug a lamp into the same outlet.

Check the status of the LED indicator on the power supply. If the green light is off, call customer support.

Check the status of the LED indicator on the display. If the display is on but the green light is neither steady nor blinking, call customer support.

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Connect the Video Cable

1 Turn off your computer and display before connecting the two units.

2 Plug the video cable into the D-sub VGA connector port on the back panel.

3 Plug the other end into the VGA port on the computer.

4 Make sure the cable connectors are properly aligned, then tighten the connecting screws to ensure a secure connection.

5 Turn on the display first and then the computer.

IN OPERATION: Blank screen

Check the LED indicator on the display. If it is steady green, but you have no image on the screen, check that all connections are secure and the power is on. If the problem still exists, call customer support for assistance.

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Connect the Audio Cable

1 Plug the audio cable to the Line Out on the audio card in your computer.

2 Plug the other end into the Line In jack on the display.

3 Adjust the volume of the stereo speakers by using the volume control function on the OSD menu.

On volume control

In some instances, the volume control function may be disabled. If so, the volume has been preset to the maximum.

Although the display speakers are adequate for most audio applications, Planar does not recommend using the display speakers as the exclusive audio source for medical alarms or applications critical for audio performance.

IN OPERATION: No sound

Verify that your display unit has speakers. Try loading a CD or another audio program.

Check the volume setting on the display and the computer. Disable mute or increase the volume.

Check that the audio cable is plugged into OUTPUT on the computer and INPUT on the display.

Plug headphones or speakers into your computer to see if they produce sound.

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Connect the Optional Touch Screen

1 Plug the RS232 cable into the RS232 port on the back panel.

2 Plug the other end into the RS232 serial port on your computer.

3 Load the touchscreen driver from the CD shipped in the display documentation package.

IN OPERATION: No touch

The CD that shipped with your display contains several touchscreen drivers. Be sure the proper touchscreen driver is installed on your computer.

If you have conflicts or any problems with the driver, try reinstalling it.

If you continue to have problems, then you need to determine the source, the display or the computer. Try using the display with another computer, or installing the driver for another display.

If the problem still exists, call customer support for assistance.

Power Management System

The VitalScreen S display complies with the VESA DPMS standard. This standard provides four power-saving modes, based on the display detecting the horizontal or vertical sync signal. The following table describes the four modes.

Mode		AC Input Power (including AC adapter)	LED Status
ON	with audio	40 watts maximum	Steady green
	without audio	37 watts maximum	Steady green
Standby		5 watts maximum	Blinking green
Suspend		5 watts maximum	Blinking green
OFF		5 watts maximum	OFF

When the display is in power-saving mode, or when it detects an incorrect timing, the display screen goes blank and the power LED indicator blinks.

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Overview of Controls

The onscreen display (OSD) menu is the user interface for controlling various aspects of the VitalScreen display. With it you can adjust functions such as brightness, contrast, horizontal and vertical display position, and speaker volume.

Use the push buttons on the front of the display to adjust the controls. Access the OSD menu with a quick press to the Function UP button when the display is powered-up. If your computer is in power-saving mode, or is powered-down, the OSD menu is inaccessible.

Legend

1 Function UP and DOWN buttons
Select functions to the left (UP) or right (DOWN). Function UP also activates the OSD menu.

2 Adjust PLUS and MINUS buttons
Change the value of the selected function. Each button also serves as a Function ENTER button.

3 Power switch
Turns the display ON or OFF when pressed for a minimum of 2 seconds. Also exits the OSD main menu and submenus with a quick press.

4 Power ON indicator
Stays lit when the power is on and the display is receiving a proper video signal. It blinks slowly when the display is in power-saving mode.

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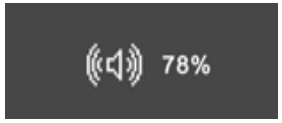
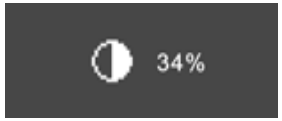
Hot Key Functions

Three Hot Key functions allow you to make quick adjustments to the display setting, volume, and contrast without accessing the OSD menu.

Auto Adjust. Press the Function DOWN button to automatically apply a display setting. A small Auto Adjust OSD is also displayed.



Audio-Volume. Press the Adjust PLUS button to change the audio volume directly. A small Audio-Volume OSD is also displayed.



Contrast. Press the Adjust MINUS button to change the contrast of the display directly. A small contrast OSD is also displayed.

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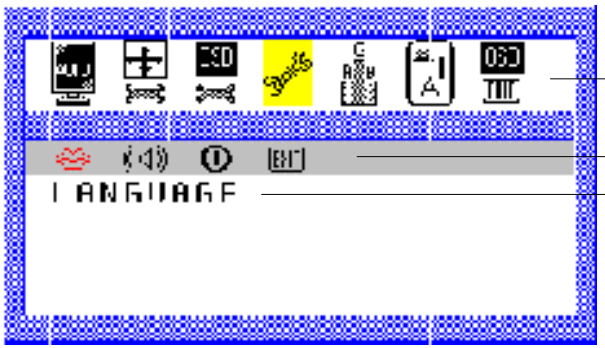
Onscreen Display Main Menu

This screen appears when you access the OSD main menu. The top row of icons represents the main menus. When a menu item is highlighted, its submenu, and a description of the submenu item, appears below the main menu bar.



In Operation: Poor image quality

1 Bring up the OSD menu and set the display to its native resolution, refresh rate, and maximum color depth.

2 Auto adjust the display.

3 Go to the Windows shutdown screen and set phase.

4 Verify that the computer settings are compatible with the display. Check the information on the OSD menu. (See the MISC-Control menu.)

If the problem still exists, call customer support for assistance.

Function Menus

The OSD menu includes these seven main menus:

- Auto Adjust
- Monitor-Control
- OSD-Control
- Misc-Control
- Graphic-Control
- Graph/Text
- Exit

The following tables describe the main menus and their various submenus.

Auto Adjust		
		Allows the display to determine and select the settings that are the most appropriate for your system requirements. This function tunes the display to the video card in your computer. With the Auto Adjust icon selected, press either Function ENTER button to apply the display settings automatically.

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Monitor–Control

Allows you to adjust the display characteristics.

With the Monitor-Control icon selected, press either Function ENTER button to activate the submenu.

H-Position. Press the Adjust PLUS or MINUS button to move the display screen horizontally to the desired position.

V-Position. Press the Adjust PLUS or MINUS button to move the display screen vertically to the desired position.

Phase. Press the Adjust PLUS or MINUS button to fine-tune the display screen. An improper phase adjustment results in pixel jitter or display noise.

Clock. Press the Adjust PLUS or MINUS button to stabilize the display clock timing. An improper clock setting results in wide vertical bands on the display.

Reset. Press either Function ENTER button to reset the Monitor-Control submenu values to the factory default values.

Exit. Press either Function ENTER button to exit the Monitor-Control submenu.

OSD–Control

Allows you to adjust the position of the onscreen display on the screen.

With the OSD-Control icon selected, press either Function ENTER button to activate the submenu.

OSD-H-Position. Press the Adjust PLUS or MINUS button to move the OSD menu horizontally.

OSD-V-Position. Press the Adjust PLUS or MINUS button to move the OSD menu vertically.

Exit. Press either Function ENTER button to exit the OSD-Control submenu.

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MISC–Control

Allows you to select the display language, adjust the volume setting, and view system information.

With the MISC-Control icon selected, press either Function ENTER button to activate the submenu.

Language. Press the Adjust PLUS or MINUS button to select the desired OSD display language. Languages supported: English, German, French, Spanish, and Italian.

Audio Volume. Press the Adjust PLUS or MINUS button to decrease or increase the volume of the stereo speakers.

Information. When selected, information displayed includes the current resolution, vertical refresh rate, and display firmware version.

Exit. Press either Function ENTER button to exit the MISC-Control submenu.

Graphic–Control

Allows you to adjust the display contrast, brightness, and color settings.

With the Graphic-Control icon selected, press either Function ENTER button to activate the submenu.

Contrast. Press the Adjust PLUS or MINUS button to adjust the difference between the lightest and darkest areas of the display. The contrast level can range from 0 to 63.

Brightness. Press the Adjust PLUS or MINUS button to adjust the light level on the display screen Make this adjustment in conjunction with the Contrast parameter.

Color. Press the Adjust PLUS or MINUS button to select the display color. The available options are 9300, 6500, and User. The 9300 and 6500 options allow you to set the Color Temperature to CIE coordinate value 9300 and 6500 degrees respectively. Selecting the User option allows you to customize the Red, Green, and Blue coordinates.

R, G, B. Press the Adjust PLUS or MINUS button to make individual adjustments to the Red, Green, and Blue gain for the color temperature. There are 127 levels of adjustments (0 to 127) available. Before adjusting these fields, select the User option in the Color submenu.

Auto Level. Press either Function ENTER to automatically perfect the white balance display.

Exit. Press either Function ENTER button to exit the Graphic-Control submenu.

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Graph/Text		
		Allows you to change the DOS resolution from 640 x 400 to 720 x 400. With the Graph/Text icon selected, press the Adjust PLUS or MINUS button to change the resolution from one setting to the other.

Exit		
		Allows you to exit the OSD menu. With the Exit icon selected, press either Function ENTER button. The OSD menu automatically exits after a brief period of inactivity.

Technical Information

VSS15X / VSS15X-TR	Specification	
XGA flat-panel unit	15-inch active matrix color TFT LCD; 1024 (H) x 768 (W) pixels	
Control functions power	Software power switch with LED indicator (Press minimum of 2 seconds to turn ON/OFF.)	
Onscreen display (OSD)	Main Menu	Submenu
	Auto Adjust	
	Monitor-Control	H-Position/V-Position/Phase/Clock/Reset/Exit
	OSD-Control	OSD-H-Position/OSD-V-Position/Exit
	MISC-Control	Language/Audio Volume/Information/Exit
	Graphic-Control	Contrast/Brightness/Color/RGB/Auto Level/Exit
	Graph/Text	640 x 400/720 x 400
	Exit	
Display area (mm)	304.1 (W) x 228.1 (H); 380.1 (15-inch) diagonal	
Response (Rise/Fall) Time (ms)	20/5 ms typical	
Contrast ratio	500:1 typical; 3000:1 minimum	
Brightness (non-touch)	300 cd/m^2 typical; 230 cd/m^2 minimum	
Viewing angle (degrees)	70/70 (L/R) horizontal; 55/65 (U/D) vertical	
Pixel pitch (mm)	0.297 (H) x 0.297 (W)	
Display color	16.2 M colors	
Video interface	VGA compatible analog RGB / composite sync	
Scanning frequency	24–62 k horizontal; 56–77 vertical	
Number of factory, preset mode	22	
Power management	Meets VESA DPMS	
Power consumption (ON/OFF, watts)	40/5 maximum	
Dimensions (mm)	408 (W) x 388 (H) x 175 (D)	
Net weight (kg)	5 VESA mounting; 7.5 deskstand mounting	
Power adapter, Ault	12 volts/3.3 amps	
Options	Wall mount, desk stand, touch screen	
Environment	Operating temperature: 0° (zero) to 40° Celsius Relative humidity: 10% to 90%	
Audio (Two 1-watt speakers with amplifier)	Yes	
Regulatory	See Regulatory Compliance	

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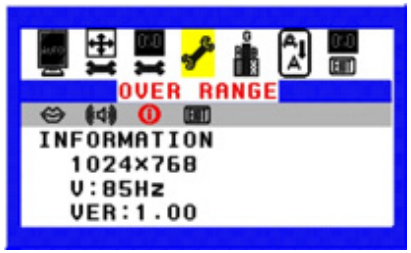
Supported Timing

Item	Standard	Resolution (pixel)	Dot Clock (MHz)	Vertical Scanning Frequency (Hz)	Horizontal Scanning Frequency (kHz)
1	NEC PC98	640x400	25.20	70.15	31.50
2	NEC PC98	640x400	21.05	56.42	24.83
3	MAC 13-inch mode	640x480	30.24	66.67	35.00
4	MAC 16-inch mode	832x624	57.28	74.55	49.73
5	MAC 17-inch mode	1024x768	80.00	75.02	60.24
6	VGA	640x350	25.18	70.09	31.47
7	VGA	640x400	25.18	70.09	31.47
8	VGA	640x480	25.18	59.94	31.47
9	VESA	640x480	31.50	72.81	37.86
10	VESA	640x480	31.50	75.00	37.50
11	VESA	800x600	36.00	56.25	35.16
12	SVGA	800x600	40.00	60.32	37.88
13	VESA	800x600	50.00	72.19	48.08
14	VESA	800x600	49.50	75.00	46.88
15	VGA	720x400	28.32	70.09	31.47
16	XGA	1024x768	65.00	60.00	48.36
17	VESA	1024x768	75.00	70.07	56.48
18	VESA	1024x768	78.75	75.03	60.02
19		1024x768	71.64	66.13	53.96
20	SUN	1024x768	64.13	59.98	48.29
21	SUN	1024x768	74.25	70.04	56.59
22	SUN	1024x768	84.38	77.07	62.04

Troubleshooting

Problem	Solution
Display indicates “Over Range”	Either the frequency range or the incoming resolution is out of display specifications.
Frequency range. The incoming frame rate is higher than 85 Hz. The screen display may not be centered, and this warning message appears. 	Check that the scanning frequency is in a horizontal range of 24 to 62 kHz and a vertical range of 55 to 77 Hz.
Incoming resolution. The incoming resolution is higher than 1024 x 768. The video data turn off, and this warning message appears.	Check that the display resolution is set to 1280 x 1024 or lower.

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Problem	Solution
Display indicates “No Signal”	There is a faulty cable connection.
There is no video-input signal from the source video port. The OSD shows this message.	Check that the video cable is connected securely to the computer and the display.

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Overview of Standard Warranty

Summary

- Standard 1-year “repair and return” warranty on all VitalScreen displays
- Typical repair turnaround time of 10 business days
- Repair facilities and technical support in the United States and in Europe

Standard Warranty Return Procedure

As a Planar Standard Warranty customer, you must follow the procedure below if you have a non-functioning 15" VitalScreen S display. Planar customer service staff will attempt to correct any minor issues that may be causing the problem. Once Planar has determined that you have a non-functioning product, Planar will arrange for return and repair of the non-functioning product.

1. Contact Planar via the web at http://www.planar.com/support. In North America, call (866) PLANAR1 (866.752.6271). In Europe, call +358 9 420 01 or send your info by fax to +358 9 420 0200. You must have the model number, serial number, and proof-of-purchase available.
2. Planar customer service staff will attempt to correct any minor issues that may be causing the problem. If we are unable to correct the problem to your satisfaction, we will issue a Return Material Authorization (RMA).
3. You must return the product, as specified, to Planar Systems. Do not return the battery cell or cart to planar Systems unless directed by Planar customer service.
4. Planar will validate the defect, repair the unit, and return the unit to you. The typical turnaround time is 10 business days.

At its sole discretion, Planar may charge you the customer for returned units deemed functional or for returned units with only customer-caused damage. It is the responsibility of the customer to properly package the hardware, include all appropriate materials, and return it to the location specified by Planar customer service.

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Summary Limitations and Exclusions of VitalScreen Displays

1. Warranty is valid only for the first consumer purchaser (non-transferable).
2. Warranty does not cover the battery cell(s), mouse, or keyboard.
3. The customer must provide original proofs of purchase for the hardware.
4. Warranty is void on any product with a defaced, modified, or removed serial number.
5. Warranty is void on any product with damage, deterioration, or malfunction resulting from the following:
   a) Accident, misuse, neglect, fire, water, lightning, or other acts of nature, unauthorized product modification, or failure to follow instructions supplied with the product.
   b) Repair or attempted repair by anyone not authorized by Planar.
   c) Any damage of the product due to shipment.
   d) Removal or installation of the product.
   e) Causes external to the product, such as electric power fluctuations or failure.
   f) Use of supplies or parts not meeting Planar specifications.
   g) Normal wear and tear, including backlights dimming over time.
   h) Any other cause which does not relate to a product defect.
6. Warranty excludes removal, installation, and setup service charges.

Limitation of Implied Warranties

THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, WHICH EXTEND BEYOND THE DESCRIPTION CONTAINED HEREIN INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

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Exclusion of Damages

THE LIABILITY OF PLANAR IS LIMITED TO THE COST OF REPAIR OR REPLACEMENT OF THE PRODUCT. PLANAR SHALL NOT BE LIABLE FOR THE FOLLOWING:

1. DAMAGE TO OTHER PROPERTY CAUSED BY ANY DEFECTS IN THE PRODUCT, DAMAGES BASED UPON INCONVENIENCE, LOSS OF USE OF THE PRODUCT, LOSS OF TIME, LOSS OF PROFITS, LOSS OF BUSINESS OPPORTUNITY, LOSS OF GOODWILL, INTERFERENCE WITH BUSINESS RELATIONSHIPS, OR OTHER COMMERCIAL LOSS, EVEN IF ADVISED OF THEIR POSSIBILITY OF SUCH DAMAGES.
2. ANY OTHER DAMAGES, WHETHER INCIDENTAL, INDIRECT, CONSEQUENTIAL, OR OTHERWISE.
3. ANY CLAIM AGAINST THE CUSTOMER BY ANY OTHER PARTY.

Effect of Local Law

This warranty gives you specific legal rights, and you may have other rights, which vary from locality to locality. Some localities do not allow limitations on implied warranties and/or do not allow the exclusion of incidental or consequential damages, so the above limitations and exclusions may not apply to you.

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Ordering Information

Non-touch display

Use the information in these tables to order parts for the VSS15X non-touch display.

VSS15X Display	Part Number
VSS 15X 15-inch XGA VitalScreen S Medically Certified Display with desk stand and U.S. power cord	997-2261-01
VSS 15X 15-inch XGA VitalScreen S Medically Certified Display with desk stand and European power cord	997-2262-01
VSS 15X 15-inch XGA VitalScreen S Medically Certified Display with VESA mounting plate and U.S. power cord	997-2265-01
VSS 15X 15-inch XGA VitalScreen S Medically Certified Display with VESA mounting plate and European power cord	997-2266-01

VSS15X Accesssory	Original Part	Replacement Part
U.S. power cord	903-0169-00	
European power cord	903-0251-00	
VGA cable	903-0454-00	903-0167-00
Audio cable	903-0455-00	903-0168-00
Power adapter, Ault	903-0013-01	

Resistive-touch display

Use the information in these tables to order parts for the VSS15X-TR resistive-touch display.

VSS15X-TR Display	Part Number
VSS 15X-TR 15-inch XGA VitalScreen S Medically Certified Display with desk stand and U.S. power cord	997-2401-01
VSS 15X-TR 15-inch XGA VitalScreen S Medically Certified Display with desk stand and European power cord	997-2402-01
VSS 15X-TR 15-inch XGA VitalScreen S Medically Certified Display with VESA mounting plate and U.S. power cord	997-2403-01
VSS 15X-TR 15-inch XGA VitalScreen S Medically Certified Display with VESA mounting plate and European power cord	997-2404-01

VSS15X-TR Accessory	Original Part	Replacement Part
U.S. power cord	903-0169-00	
European power cord	903-0251-00	
VGA cable	903-0454-00	903-0167-00
Audio cable	903-0455-00	903-0168-00
Touchscreen cable	903-0456-00	903-0233-00
Power adapter, Ault	902-0013-01	